



# Medical Minute with Dr. Madison Mills

**Key Question:** What medical knowledge did soldiers have during the US-Mexican War?

**Relevance to Student Knowledge:**  
All students are familiar with basic hygiene practices and have had vaccinations.

**Student Learning Objectives:**  
Students will be able to compare and contrast preventative health measures used during the US-Mexican War and those used today. Students will be able to explain how preventative health measures keep us healthy.

## TEKS

*History:* 7.4(A,B) Individuals, events, issues of the Mexican War  
*Health Info.:* 7.3(A) Preventive health measures  
*Healt Info.:* 7.3(C) Distinguish risk factors of communicable & noncommunicable diseases  
*Health Influencing Factors:* 7.65(A) Relate physical environmental factors to health

## Materials Included

- Teacher historical background information

## Teacher-Supplied Materials

- None

**BACKGROUND:** During the U.S.-Mexican War, more soldiers died from disease than from battle wounds. Approximately 70% of deaths were due to disease. The lesson focuses on four health threats: 1) Poor drinking water, 2) Garbage, 3) Mosquitoes, and 4) Lack of personal hygiene.

Soldiers at Fort Brown got their drinking water from the Rio Grande. However, the river was also used for bathes and as a garbage dump.

Mosquitoes were a major pest. Many army physicians suspected that mosquitoes spread diseases as well. To protect themselves, soldiers used lard, camphor oil, and cactus juice as bug spray.

Another health threat was a lack of personal hygiene. U.S. Army regulations stated that soldiers must wash their hands and face daily, their feet twice a week, and bathe at least once a week. Furthermore, soldiers were to change their underwear three times a week.

Check out the following websites for more information:

- <http://www.texancultures.utsa.edu/hiddenhistory/Pages9/spurlin.htm> - "Cries for Help: Medicine in the Mexican War" by Charles D. Spurlin (Institute of Texan Cultures)
- [http://history.amedd.army.mil/booksdocs/civil/gillett2/amedd\\_1818-1865\\_chpt5.htm](http://history.amedd.army.mil/booksdocs/civil/gillett2/amedd_1818-1865_chpt5.htm) - History of the U.S. Army Medical Dept.: 1818-1865, by Mary C. Gillett (Center of Military History)

## LESSON

### Introduction

1. Tell students that during the U.S.-Mexican War, more soldiers died of disease than of battle wounds.
2. Tell students to stand up.
3. Use the chart on the right to divide students into two different parts of the room.
4. Tell the class that they are all soldiers who died during the U.S.-Mexican War. The bigger group died of disease and the smaller group died in combat or because of battle wounds.

### Guided Lesson

1. Ask students how they can prevent disease. List responses.
2. Tell students that Dr. Mills was a surgeon during the U.S.-Mexican War. Dr. Mills gave four suggestions to prevent disease.
  - Drink water upstream from where you use the bathroom
  - Bury garbage
  - Avoid mosquitoes
  - Take bathes
3. Tell students that his advice was medical technology in 1846. Today we still do some of these things to stay healthy, but we also have modern medical technology like vaccinations.

## MANAGEMENT

1. Preview the activity.
2. Write questions on the butcher paper.

**Vocabulary:** None.

# STUDENTS	DEATHS DUE TO DISEASE	DEATHS DUE TO COMBAT/BATTLE WOUNDS
25	17	8
26	18	7
27	18	7
28	19	6
29	20	5
30	21	4
31	21	4
32	22	3
33	23	2
34	23	2
35	24	1

## **Discovery**

1. Split students into four groups.
2. Have each group create a Venn diagram comparing and contrasting the methods of medical technology during the U.S.-Mexican War with methods we have today. Help students with the first item (e.g., Take a bath is in both the 1846 and Today circles; Vaccinations is only in the Today circle.)
3. When students are finished, draw a Venn diagram on the board and complete it as a class.
4. Give each group a large piece of butcher paper with one of the following questions written on top:
  - Why should soldiers drink water upstream from where they used the bathroom?
  - Why should soldiers bury their garbage?
  - Why should soldiers avoid mosquitoes?
  - Why should soldiers take a lot of bathes?
5. Tell students to include the following on their paper:
  - How their particular health practice stops disease
  - Which specific diseases it prevents
  - What preventative medicine or technology we use today to stop these illnesses
  - Picture of the health practice the soldiers used and a picture of the health practice we use today

## **Wrap-up Activities**

1. Have students present their findings to the rest of the class.
2. Ask students: Why is it important that soldiers stay healthy? List responses.
3. Allow students to look at the replica items.

## **Extensions**

1. Have a class discussion on the modern health tips that the students came up with to avoid infection and disease, along with any the teacher would like to add (i.e., always wash your hands after using the restroom, keep up to date with your vaccinations, use insect repellent, etc.)
2. Ulysses S. Grant wrote he was “ten to one more afraid of [yellow fever] than the Mexicans.” Have students do computer research on Yellow Fever. How did it affect soldiers in the U.S.-Mexican War? How is Fort Brown connected to Yellow Fever? (Note that Dr. William Gorgas, who was stationed at Fort Brown in the 1880s, helped eliminate yellow fever.)

**Student Evaluation/Assessment:** Observe each student for class participation.

